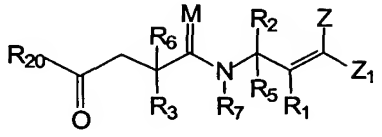
WHAT IS CLAIM IS:

1. At least one compound of the formula (I):



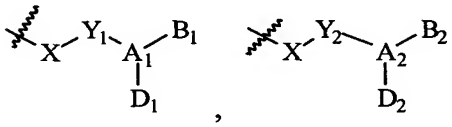
(I)

wherein

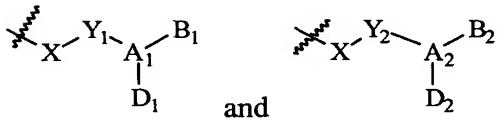
M is O or S;

R_1 is H, F, an alkyl group, OH, SH, or an O-alkyl group;

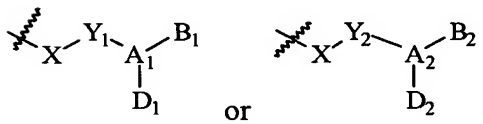
R_2 and R_5 are independently selected from H,



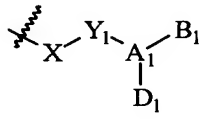
or an alkyl group, wherein said alkyl group is different from



with the proviso that at least one of R_2 or R_5 must be



and wherein, when R_2 or R_5 is



X is =CH or =CF and Y_1 is =CH or =CF,

or X and Y_1 together with Q' form a three-membered ring in which Q' is -C(R_{10})(R_{11})- or -O-, X is -CH- or -CF-, and Y_1 is -CH-, -CF-, or -C(alkyl)-, where R_{10} and R_{11} independently are H, a halogen, or an alkyl group, or, together with the carbon atom to which they are attached, form a cycloalkyl group or a heterocycloalkyl group,

or X is -CH_2-, -CF_2-, -CHF-, or -S-, and Y_1 is -O-, -S-, -NR_{12}-, -C(R_{13})(R_{14})-, -C(O)-, -C(S)-, or -C($CR_{13}R_{14}$)-,

wherein R_{12} is H or alkyl, and R_{13} and R_{14} independently are H, F, or an alkyl group, or, together with the atoms to which they are bonded, form a cycloalkyl group or a heterocycloalkyl group;

A_1 is C, CH, CF, S, P, Se, N, NR_{15}, S(O), Se(O), P-OR_{15}, or P-$NR_{15}R_{16}$,

wherein R_{15} and R_{16} independently are an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group, or, together with the atom to which they are bonded, form a heterocycloalkyl group;

D_1 is a moiety with a lone pair of electrons capable of forming a hydrogen bond; and

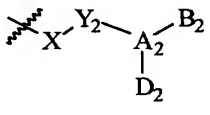
B_1 is H, F, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -OR_{17}, -SR_{17}, -$NR_{17}R_{18}$, -$NR_{19}NR_{17}R_{18}$, or -$NR_{17}OR_{18}$,

wherein R_{17}, R_{18}, and R_{19} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group;

and with the provisos that when D_1 is the moiety ≡N with a lone pair of electrons capable of forming a hydrogen bond, B_1 does not exist; and when A_1 is an sp^3 carbon, B_1 is not $-NR_{17}R_{18}$ when D_1 is the moiety $-NR_{25}R_{26}$ with a lone pair of electrons capable of forming a hydrogen bond, wherein R_{25} and R_{26} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group;

and wherein D_1-A_1-B_1 optionally forms a nitro group where A_1 is N;

and further wherein, when R_2 or R_5 is



,

X is =CH or =CF and Y_2 is =C, =CH, or =CF,

or X and Y_2 together with Q' form a three-membered ring in which Q' is $-C(R_{10})(R_{11})-$ or -O-, X is -CH- or -CF-, and Y_2 is -CH-, -CF-, or -C(alkyl)-, where R_{10} and R_{11} independently are H, a halogen, or an alkyl group, or, together with the carbon atom to which they are attached, form a cycloalkyl group or a heterocycloalkyl group,

or X is $-CH_2-$, $-CF_2-$, -CHF-, or -S-, and Y_2 is -O-, -S-, $-N(R'_{12})-$, $-C(O)-$, $-C(R'_{13})(R'_{14})-$, -C(S)-, or $-C(CR'_{13}R'_{14})-$,

wherein R'_{12} is H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, $-OR'_{13}$, $-NR'_{13}R'_{14}$, $-C(O)-R'_{13}$, $-SO_2R'_{13}$, or $-C(S)R'_{13}$, and R'_{13} and R'_{14}, independently are H, F, or an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group, or, together with the atom to which they

are attached, form a cycloalkyl group or a heterocycloalkyl group;

A_2 is C, CH, CF, S, P, Se, N, NR_{15}, S(O), Se(O), P-OR_{15}, or P-$NR_{15}R_{16}$,

wherein R_{15} and R_{16} independently are an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group, or, together with the atom to which they are bonded, form a heterocycloalkyl group;

D_2 is a moiety with a lone pair of electrons capable of forming a hydrogen bond; and

B_2 is H, F, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -OR_{17}, -SR_{17}, -$NR_{17}R_{18}$, -$NR_{19}NR_{17}R_{18}$, or -$NR_{17}OR_{18}$,

wherein R_{17}, R_{18}, and R_{19} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group;

and further wherein any combination of Y_2, A_2, B_2, and D_2 optionally can form a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group;

R_3 and R_6 are independently H, F, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -$C(O)R_{17}$, -OR_{17}, -SR_{17}, -$NR_{17}R_{18}$, -$NR_{19}NR_{17}R_{18}$, or -$NR_{17}OR_{18}$,

wherein R_{17}, R_{18}, and R_{19} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group;

or, R_3 and R_6, together with the carbon atom to which they are attached, form a cycloalkyl group or a heterocycloalkyl group;

R_7 is H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, $-OR_{17}$, $-SR_{17}$, $-NR_{17}R_{18}$, $-NR_{19}NR_{17}R_{18}$, or $-NR_{17}OR_{18}$,

wherein R_{17}, R_{18}, and R_{19} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group;

or R_7, together with R_3 or R_6 and the atoms to which they are attached, forms a heterocycloalkyl group;

R_{20} is H, OH, or any suitable organic moiety; and

Z and Z_1 are independently H, F, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, $-C(O)R_{21}$, $-CO_2R_{21}$, -CN, $-C(O)NR_{21}R_{22}$, $-C(O)NR_{21}OR_{22}$, $-C(S)R_{21}$, $-C(S)NR_{21}R_{22}$, $-NO_2$, $-SOR_{21}$, $-SO_2R_{21}$, $-SO_2NR_{21}R_{22}$, $-SO(NR_{21})(OR_{22})$, $-SONR_{21}$, $-SO_3R_{21}$, $-PO(OR_{21})_2$, $-PO(R_{21})(R_{22})$, $-PO(NR_{21}R_{22})(OR_{23})$, $PO(NR_{21}R_{22})(NR_{23}R_{24})$, $-C(O)NR_{21}NR_{22}R_{23}$, or $-C(S)NR_{21}NR_{22}R_{23}$,

wherein R_{21}, R_{22}, R_{23}, and R_{24} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an acyl group, or a thioacyl group, or wherein any two of R_{21}, R_{22}, R_{23}, and R_{24}, together with the atom(s) to which they are bonded, form a heterocycloalkyl group;

or Z_1, as defined above, together with R_1, as defined above, and the atoms to which Z_1 and R_1 are bonded, form a cycloalkyl or heterocycloalkyl group,

or Z and Z_1, both as defined above, together with the atoms to which they are

bonded, form a cycloalkyl or heterocycloalkyl group;

or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof;

and wherein said compound, or pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof, has antipicornaviral activity with an EC_{50} less than or equal to 10 μM in the HI-HeLa cell culture assay.

2. At least one compound of claim 1, wherein R_1 is H or F, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

3. At least one compound of claim 1, wherein R_{20} is H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -OR_{17}, -SR_{17}, -$NR_{17}R_{18}$, -$NR_{19}NR_{17}R_{18}$, or -$NR_{17}OR_{18}$, wherein R_{17}, R_{18}, and R_{19} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

4. At least one compound of claim 3, wherein R_{20} is the alkyl group -$C(R_{41})(R_{42})NR_{43}R_{44}$, wherein:

R_{41} and R_{42} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group; and

R_{43} and R_{44} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, -$NR_{45}R_{46}$, -$C(O)R_{45}$, -$C(S)R_{45}$, -$C(O)NR_{45}R_{46}$, -$C(S)NR_{45}R_{46}$, -$C(O)NR_{45}OR_{46}$, -$C(S)NR_{45}OR_{46}$, -$C(O)SR_{45}$, -$C(O)OR_{45}$, -$C(S)OR_{45}$, -$C(S)SR_{45}$, -OR_{45}, -SR_{45}, -$C(O)NR_{45}NR_{46}R_{47}$, -$C(S)NR_{45}NR_{46}R_{47}$, -SOR_{45}, -SO_2R_{45}, -$S(O)NR_{45}R_{46}$, -$S(O)NR_{45}(OR_{46})$, -$SO_2NR_{45}R_{46}$,-$SO_2NR_{45}(OR_{46})$, or -SO_3R_{45},

wherein R_{45}, R_{46}, and R_{47} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,

or wherein any suitable combination of R_{41}, R_{42}, R_{43}, and R_{44} together form a cycloalkyl group or a heterocycloalkyl group;

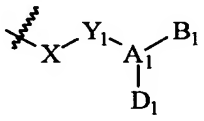
or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

5. At least one compound of claim 4, wherein at least one of R_{43} or R_{44} is -$C(O)SR_{45}$ or -$C(O)OR_{45}$, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

6. At least one compound of claim 5, wherein R_{45} is an alkyl group, a cycloalkyl group, an aryl group, a heterocycloalkyl group, or a heteroaryl group, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

7. At least one compound of claim 6, wherein R_{45} is a C_1-C_{10} alkyl group or a cycloalkyl group, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

8. At least one compound of claim 1, wherein at least one of R_2 or R_5 is



or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

9. At least one compound according to claim 8, wherein D_1 is -OR_{25}, =O, =S, ≡N, =NR_{25}, or -$NR_{25}R_{26}$, wherein R_{25} and R_{26} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group, or, together with the nitrogen atom to which they are bonded, form a

heterocycloalkyl group; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

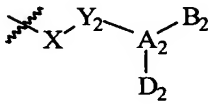
10. At least one compound according to claim 9, wherein D_1 is =O; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

11. At least one compound according to claim 8, wherein A_1 is C, CH, S, or S(O); or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

12. At least one compound according to claim 11, wherein A_1 is C; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

13. At least one compound according to claim 8, wherein B_1 is $NR_{17}R_{18}$, wherein R_{17} and R_{18} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an acyl group; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

14. At least one compound according to claim 1, wherein at least one of R_2 or R_5



is

or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

15. At least one compound according to claim 14, wherein D_2 is $-OR_{25}$, =O, =S, ≡N, $=NR_{25}$, or $-NR_{25}R_{26}$, wherein R_{25} and R_{26} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group, or, together with the atom(s) to which they are bonded, form a heterocycloalkyl group; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

16. At least one compound according to claim 15, wherein D_2 is =O; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

17. At least one compound according to claim 14, wherein A_2 is C, CH, S, or S(O); or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

18. At least one compound according to claim 17, wherein A_2 is C; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

19. At least one compound according to claim 14, wherein B_2 is $-NR_{17}R_{18}$, wherein R_{17} and R_{18} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an acyl group; or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

20. At least one compound according to claim 1, wherein A_1 is C, CH, S, or S(O) or wherein A_2 is C, CH, S, or S(O); or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

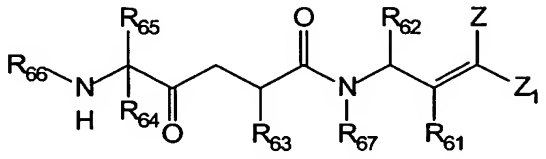
21. At least one compound according to claim 1, wherein Z and Z_1 are independently H, an aryl group, or a heteroaryl group, $-C(O)R_{21}$, $-CO_2R_{21}$, -CN, $-C(O)NR_{21}R_{22}$, $-C(O)NR_{21}OR_{22}$, $-C(S)R_{21}$, $-C(S)NR_{21}R_{22}$, $-NO_2$, $-SOR_{21}$, $-SO_2R_{21}$, $-SO_2NR_{21}R_{22}$, $-SO(NR_{21})(OR_{22})$, $-SONR_{21}$, $-SO_3R_{21}$, $-C(O)NR_{21}NR_{22}R_{23}$, or $-C(S)NR_{21}NR_{22}R_{23}$;

wherein R_{21}, R_{22}, and R_{23} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an acyl group, or a thioacyl group, or wherein any two of R_{21}, R_{22}, and R_{23}, together with the atom(s) to which they are bonded, form a heterocycloalkyl group;

or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

22. At least one compound according to claim 1, wherein M is O.

23. At least one compound having the formula X:

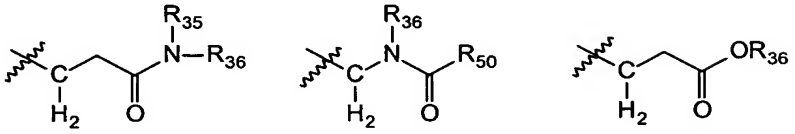


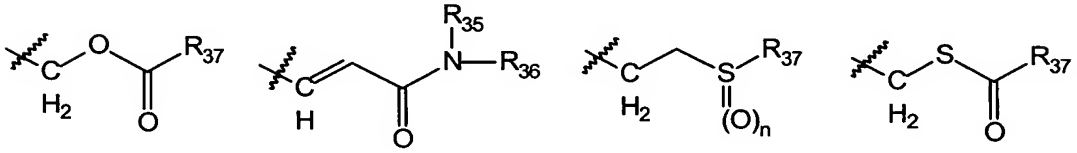
(X)

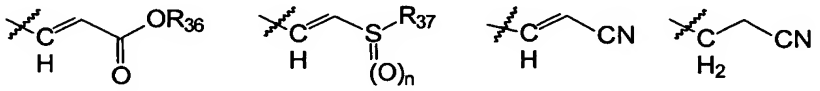
wherein

R_{61} is H, F, or an alkyl group;

R_{62} is selected from one of the following moieties:







wherein

R_{35} is H, an alkyl group, an aryl group, $-OR_{38}$, or $-NR_{38}R_{39}$,

wherein R_{38} and R_{39} independently are H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group; and

R_{36} is H or an alkyl group,

or R_{35} and R_{36}, together with the nitrogen atom to which they are attached,

form a heterocycloalkyl group or a heteroaryl group;

R_{37} is an alkyl group, an aryl group, or $-NR_{38}R_{39}$, wherein R_{38} and R_{39} are as defined above;

R_{50} is H, an alkyl group, an aryl group, $-OR_{38}$, $-SR_{39}$, $-NR_{38}R_{39}$, $-NR_{40}NR_{38}R_{39}$, or

$-NR_{38}OR_{39}$, or R_{50} and R_{36}, together with the atoms to which they are attached, form a heterocycloalkyl group;

wherein R_{38} and R_{39} are as defined above, and R_{40} is H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or an acyl group; and

n is 0, 1, or 2;

R_{63} is H or an alkyl group;

R_{64} is H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, or a heteroaryl group;

R_{65} is H or an alkyl group;

R_{66} is H, an acyl group, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a sulfonyl group, or a heteroaryl group;

R_{67} is H or an alkyl group;

and

Z and Z_1 are independently H, F, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, $-C(O)R_{21}$, $-CO_2R_{21}$, $-CN$, $-C(O)NR_{21}R_{22}$, $-C(O)NR_{21}OR_{22}$, $-C(S)R_{21}$, $-C(S)NR_{21}R_{22}$, $-NO_2$, $-SOR_{21}$, $-SO_2R_{21}$, $-SO_2NR_{21}R_{22}$, $-SO(NR_{21})(OR_{22})$, $-SONR_{21}$, $-SO_3R_{21}$, $-PO(OR_{21})_2$, $-PO(R_{21})(R_{22})$, $-PO(NR_{21}R_{22})(OR_{23})$, $-PO(NR_{21}R_{22})(NR_{23}R_{24})$, -

$C(O)NR_{21}NR_{22}R_{23}$, or $-C(S)NR_{21}NR_{22}R_{23}$,

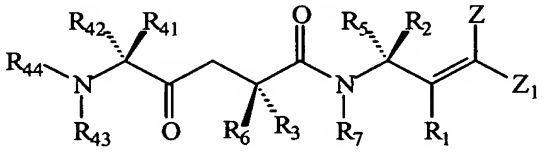
wherein R_{21}, R_{22}, R_{23}, and R_{24} are independently H, an alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an acyl group, or a thioacyl group, or wherein any two of R_{21}, R_{22}, R_{23}, and R_{24}, together with the atom(s) to which they are bonded, form a heterocycloalkyl group,

or Z and Z_1, both as defined above, together with the atoms to which they are bonded, form a heterocycloalkyl group;

or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

24. At least one compound according to claim 23, wherein R_{66} is the acyl group $-C(O)OR_{68}$ or the acyl group $-C(O)SR_{68}$, wherein R_{68} is an alkyl group, a cycloalkyl group, an aryl group, a heterocycloalkyl group, or a heteroaryl group, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

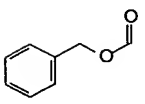
25. At least one compound according to claim 4, having the formula II:



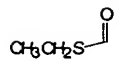
(II)

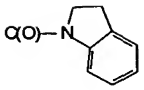
wherein R_1, R_5, R_6, R_7, R_{42}, R_{43}, and Z are H, R_2 is $CH_2CH_2C(O)NH_2$, and

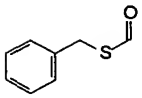
R_3 is CH_2Ph, R_{41} is $CH_2CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is

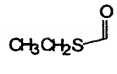


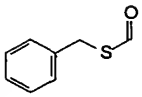
R_3 is CH_2Ph, R_{41} is $CH_2CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is



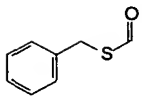
R_3 is CH_2Ph, R_{41} is $CH_2CH(CH_3)_2$, Z_1 is  , and R_{44} is

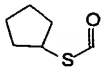


R_3 is CH_2Ph, R_{41} is $CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is 

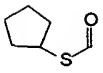
R_3 is CH_2Ph, R_{41} is $CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is 

R_3 is CH_2Ph, R_{41} is $CH_2CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is

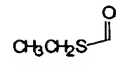


R_3 is CH_2Ph, R_{41} is $CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is 

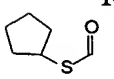
R_3 is CH_2Ph, R_{41} is $CH_2CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is



R_3 is $CH_2(p\text{-}CH_3)Ph$, R_{41} is $CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is

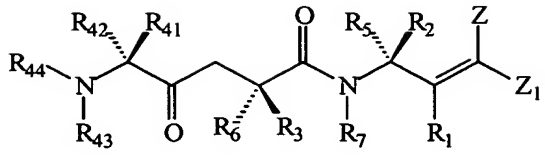
 or

R_3 is $CH_2(p\text{-}CH_3)Ph$, R_{41} is $CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is



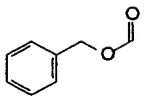
or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

26. At least one compound according to claim 4, having the formula III:

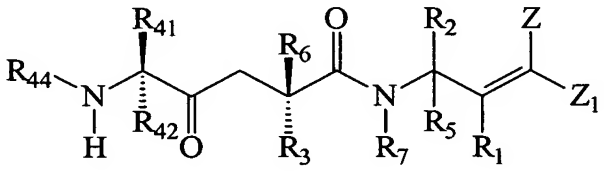


(III)

wherein R_1, R_5, R_6, R_7, R_{42}, R_{43}, and Z are H, R_3 is CH_2Ph, R_2 is $CH_2CH_2C(O)NH_2$,

R_{41} is $CH_2CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is  or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

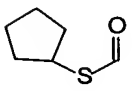
27. At least one compound of the formula (IV):

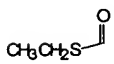


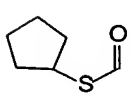
(IV)

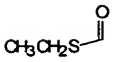
wherein:

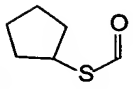
R_1, R_5, R_6, R_7, and R_{42} are H, R_2 is $CH_2CH_2C(O)NH_2$, and

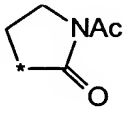
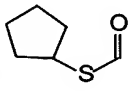
R_3 is $CH_2(p\text{-}CH_3)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is CH_2Ph, and R_{44} is 

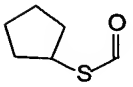
R_3 is $CH_2(p\text{-}F)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is $CH(CH_3)_2$, and R_{44} is 

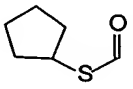
R_3 is $CH_2(p\text{-}F)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is $CH(CH_3)_2$, and R_{44} is 

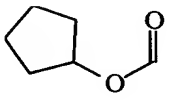
R_3 is $CH_2(p\text{-}CF_3)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is $CH(CH_3)_2$, and R_{44} is 

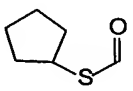
R_3 is $CH_2(p\text{-}CF_3)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is $CH(CH_3)_2$, and R_{44} is 

R_3 is $CH_2(p\text{-}CH_3)Ph$, Z and Z_1 together form  (where * indicates the point of attachment and the carbonyl group is cis to the R_1 group), R_{41} is $CH(CH_3)_2$, and R_{44} is 

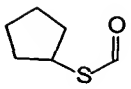
R_3 is $CH_2(p\text{-}F)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is CH_2Ph, and R_{44} is 

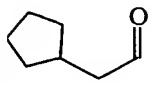
R_3 is $CH_2(p\text{-}F)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is $CH_2CH(CH_3)_2$, and R_{44} is 

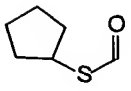
R_3 is $CH_2(p\text{-}CH_3)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is $CH(CH_3)_2$, and R_{44} is 

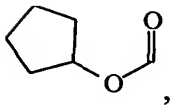
R_3 is $CH_2(p\text{-}CH_3)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is $CH_2CH(CH_3)_2$, and R_{44} is 

R_3 is CH_2Ph, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is $C(CH_3)_3$, and R_{44} is



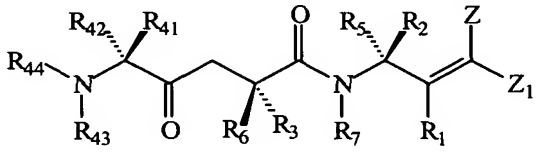
R_3 is $CH_2(p\text{-}CH_3)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is $CH(CH_3)_2$, and R_{44} is 

R_3 is $CH_2(p\text{-}F)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is cyclohexyl, and R_{44} is  or

R_3 is $CH_2(p\text{-}F)Ph$, Z is H, Z_1 is $CO_2CH_2CH_3$, R_{41} is $CH(CH_3)_2$, and R_{44} is  ,

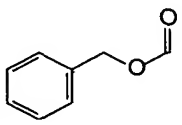
or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

28. A composition comprising at least one compound of formula II:



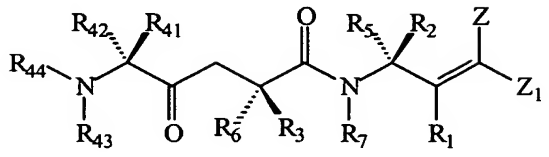
(II)

wherein R_1, R_5, R_6, R_7, R_{42}, R_{43}, and Z are H, R_3 is CH_2Ph, R_2 is $CH_2CH_2C(O)NH_2$,

R_{41} is $CH_2CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is 

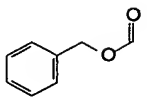
or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof,

and at least one compound of formula III:



(III)

wherein R_1, R_5, R_6, R_7, R_{42}, R_{43}, and Z are H, R_3 is CH_2Ph, R_2 is $CH_2CH_2C(O)NH_2$,

R_{41} is $CH_2CH(CH_3)_2$, Z_1 is $CO_2CH_2CH_3$, and R_{44} is  or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

29. A pharmaceutical composition comprising:

(a) a therapeutically effective amount of at least one compound as defined in claim 1 or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof; and

(b) a pharmaceutically acceptable carrier, diluent, vehicle, or excipient.

30. A method of treating a mammalian disease condition mediated by picornaviral protease activity that comprises administering to a mammal in need thereof a therapeutically effective amount of at least one compound as defined in claim 1 or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

31. A method of inhibiting the activity of a picornaviral 3C protease that comprises contacting the picornaviral 3C protease with an effective amount of at

least one compound as defined in claim 1 or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

32. A method of inhibiting the activity of a rhinoviral protease that comprises contacting the rhinoviral protease with an effective amount of at least one compound as defined in claim 1 or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof.

33. A compound according to claim 1, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof, wherein said antipicornaviral activity is antirhinoviral activity.

34. A compound according to claim 1, or a pharmaceutically acceptable prodrug, salt, active metabolite, or solvate thereof, wherein said antipicornaviral activity is anticoxsackieviral activity.